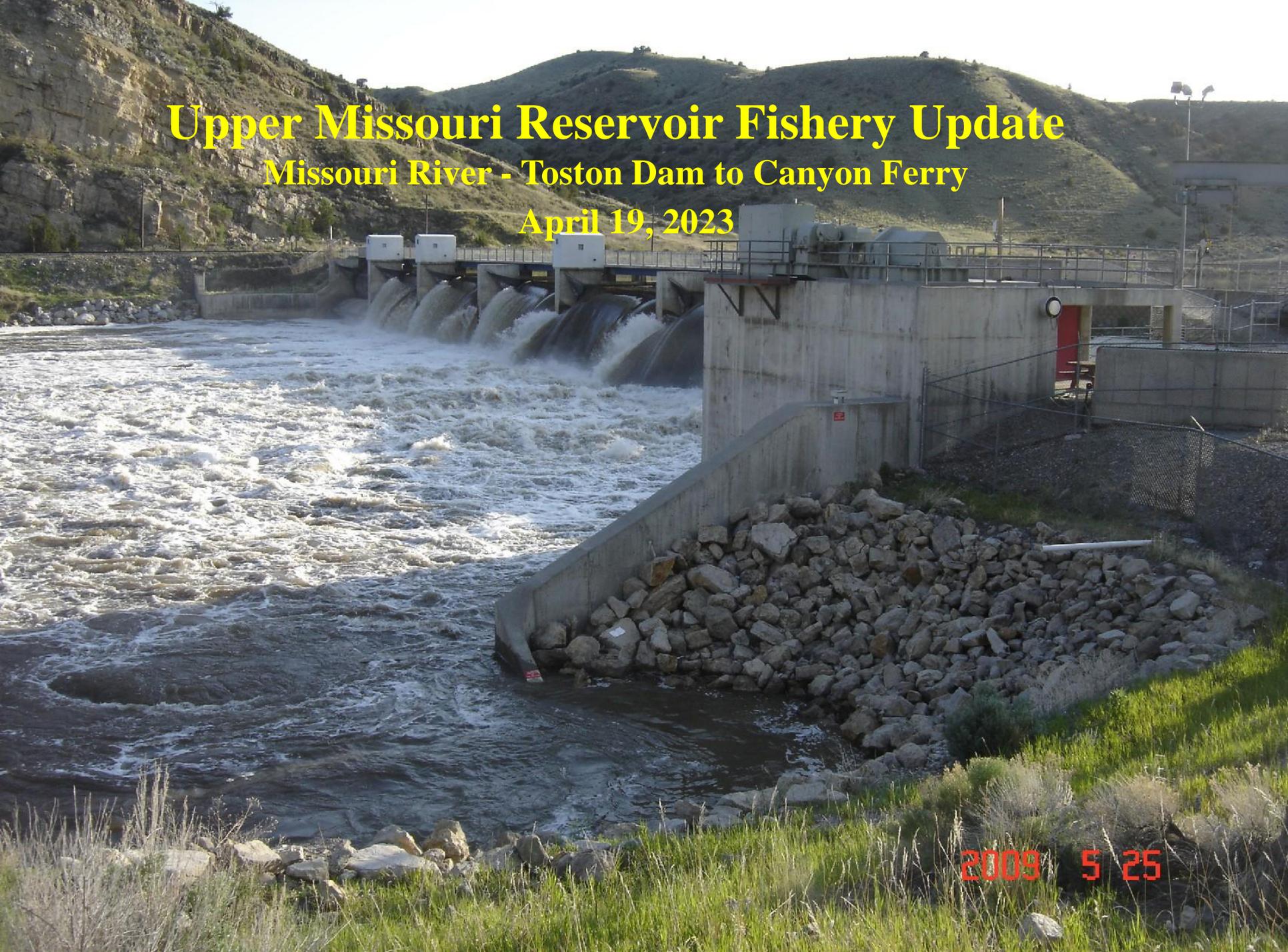


Upper Missouri Reservoir Fishery Update

Missouri River - Toston Dam to Canyon Ferry

April 19, 2023

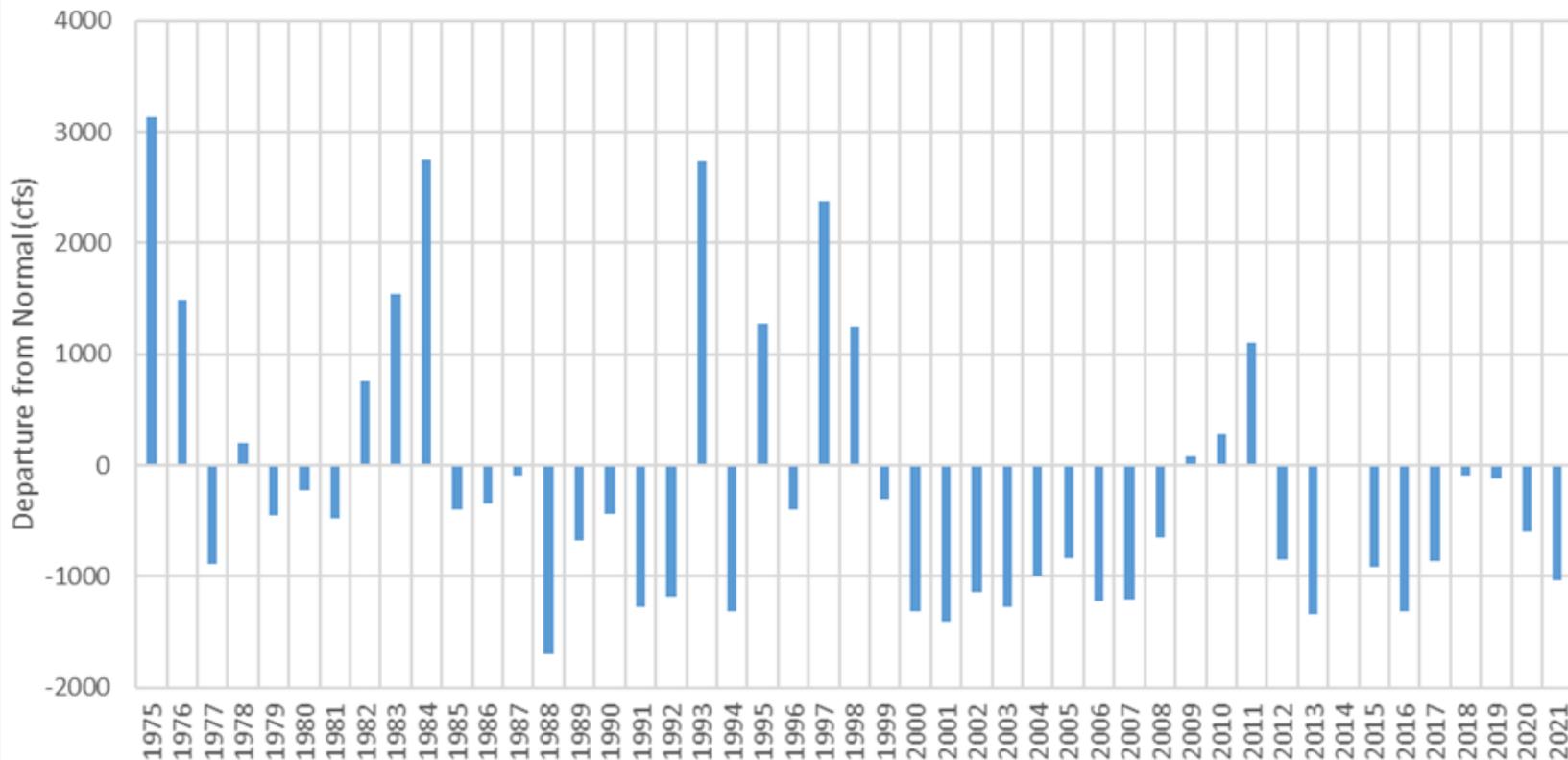


2009 5 25

Frequent Drought Since 2000

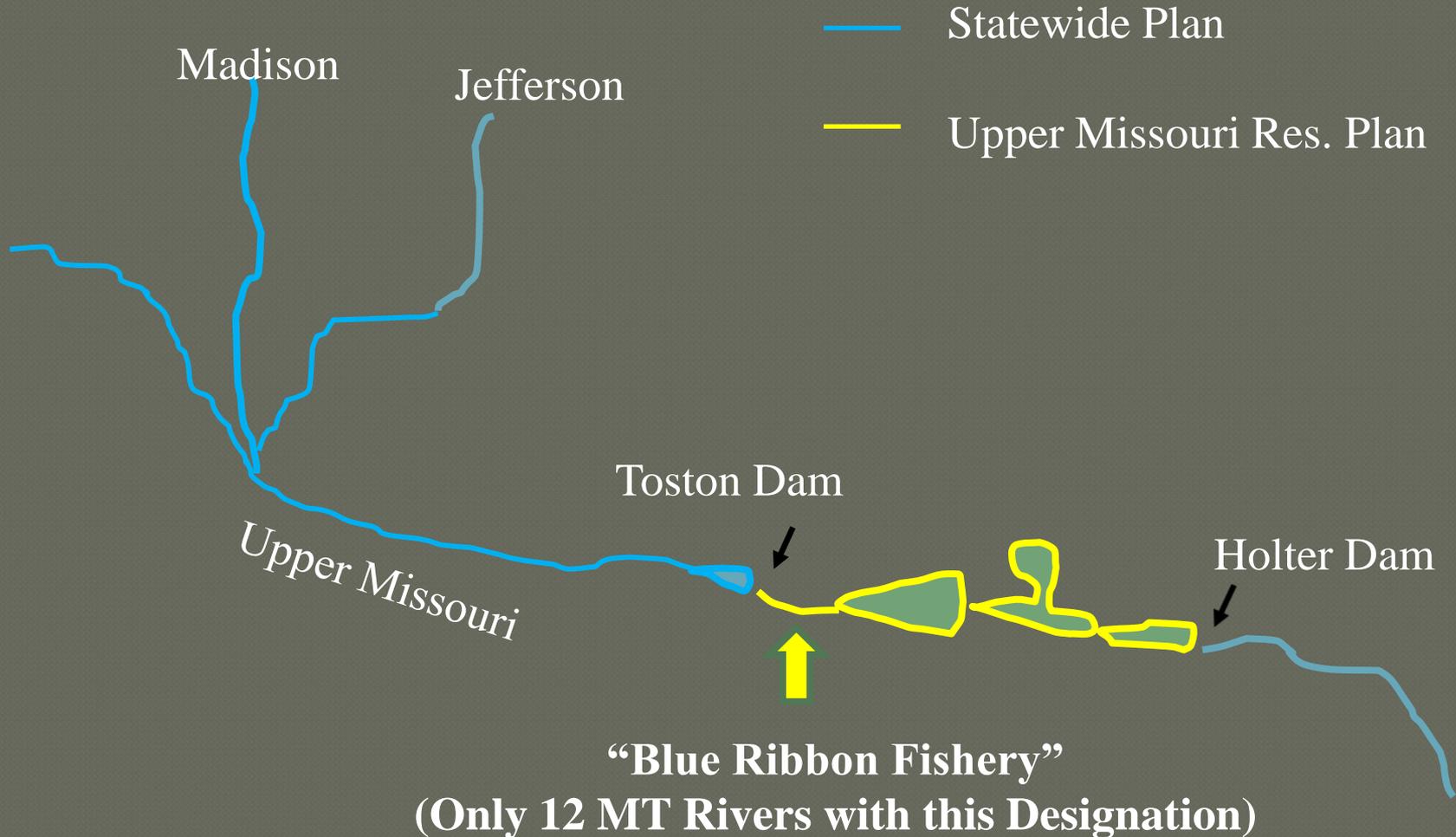
Missouri River @ Toston (USGS) 1975 to 2021

Departure from Normal August Flow (2590 cfs)



Upper Missouri – Fishery Plans

Both Plans Support “Wild Trout” Mgmt
(Habitat Focus w/o Stocking)



Strainer Telemetry Study: Walleye move into the Missouri River
After Spawning in CFR, and Return to the Lake in October.



Management Plan Species Goals:

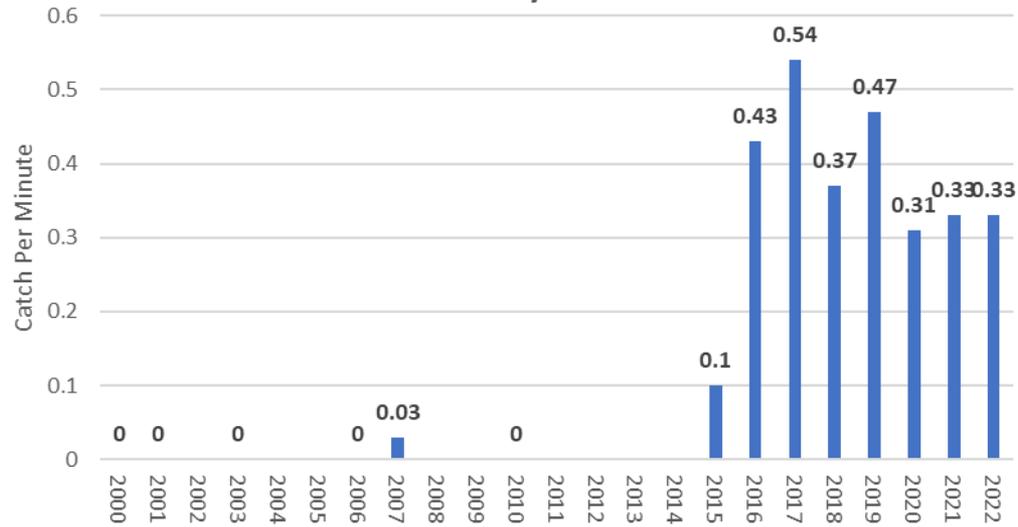
Rainbow Trout 1.0/Minute Electrofishing

Brown Trout = 0.40/Minute Electrofishing

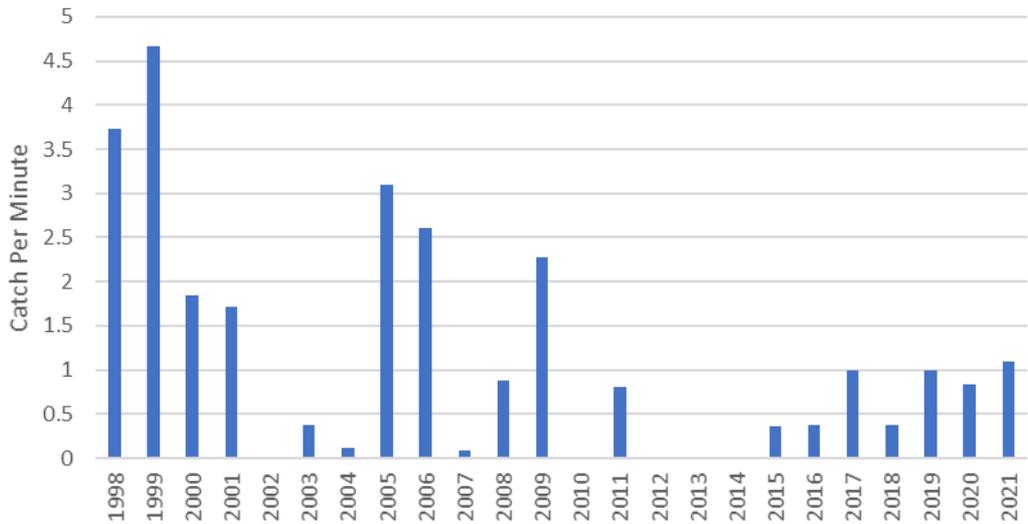
Walleye = Monitor

Northern Pike = Suppress

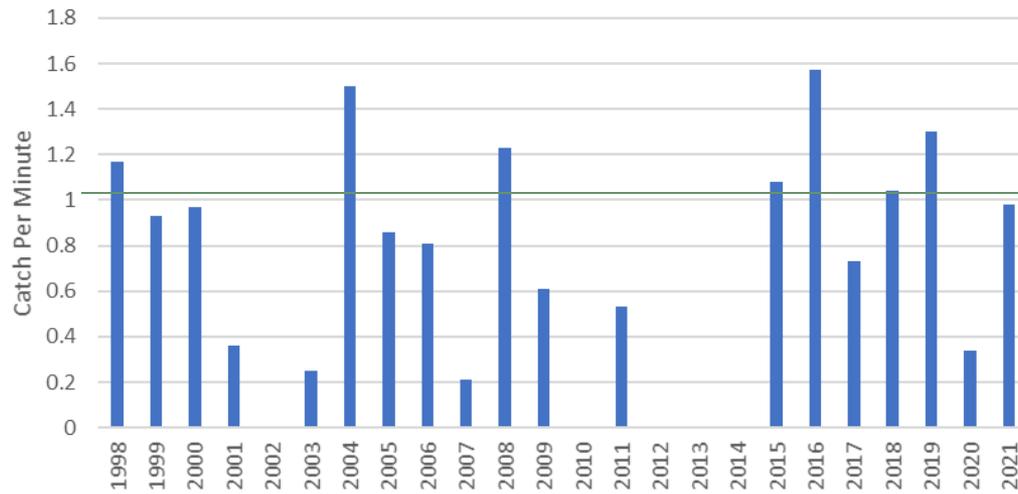
**Missouri River Catch Per Unit Effort Trend (Spring)
Walleye**



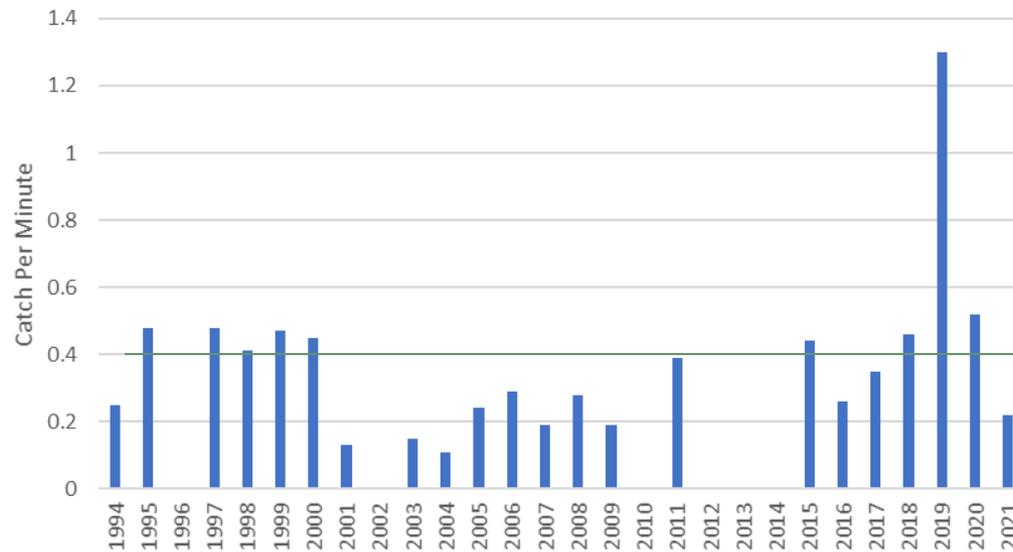
**Missouri River Catch Per Unit Effort Trend (Fall)
Mountain Whitefish**



Missouri River Catch Per Unit Effort Trend (Fall)
Rainbow Trout

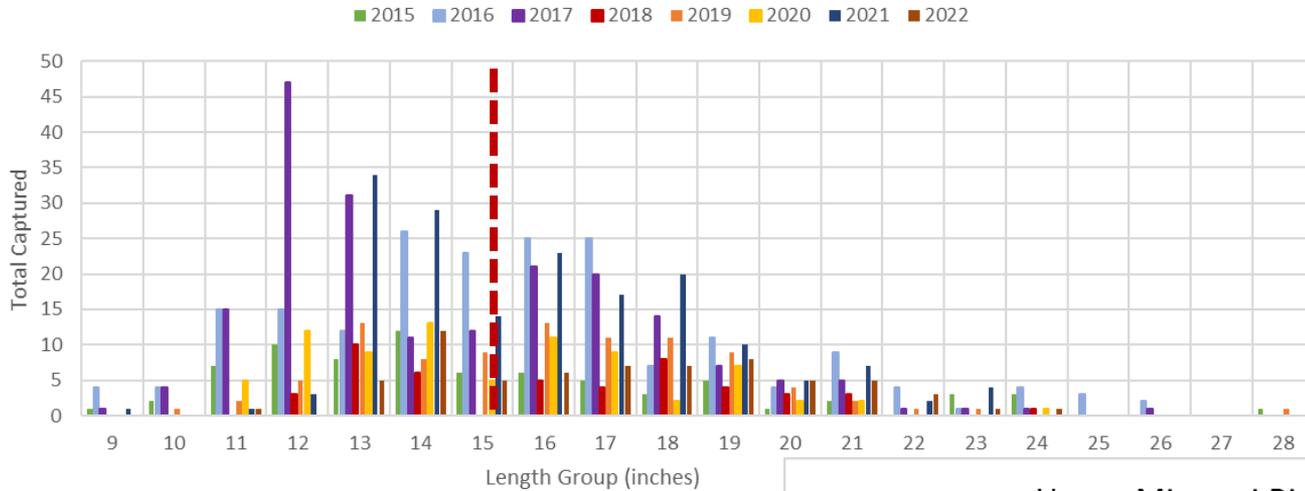


Missouri River Catch Per Unit Effort Trend (Fall)
Brown Trout

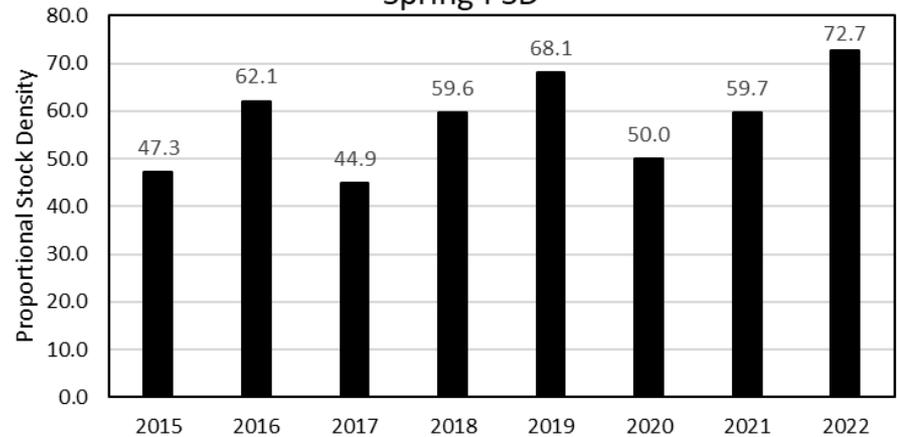


Walleye Length and PSD (2015-22)

Upper Missouri River
Walleye Length Frequency 2015-22



Upper Missouri River Walleye
Spring PSD



Toston Dam Fishery Mitigation

Restore Fish Passage from Missouri River to Deep Creek (1992)

Montana Ditch Siphon Under Deep Creek

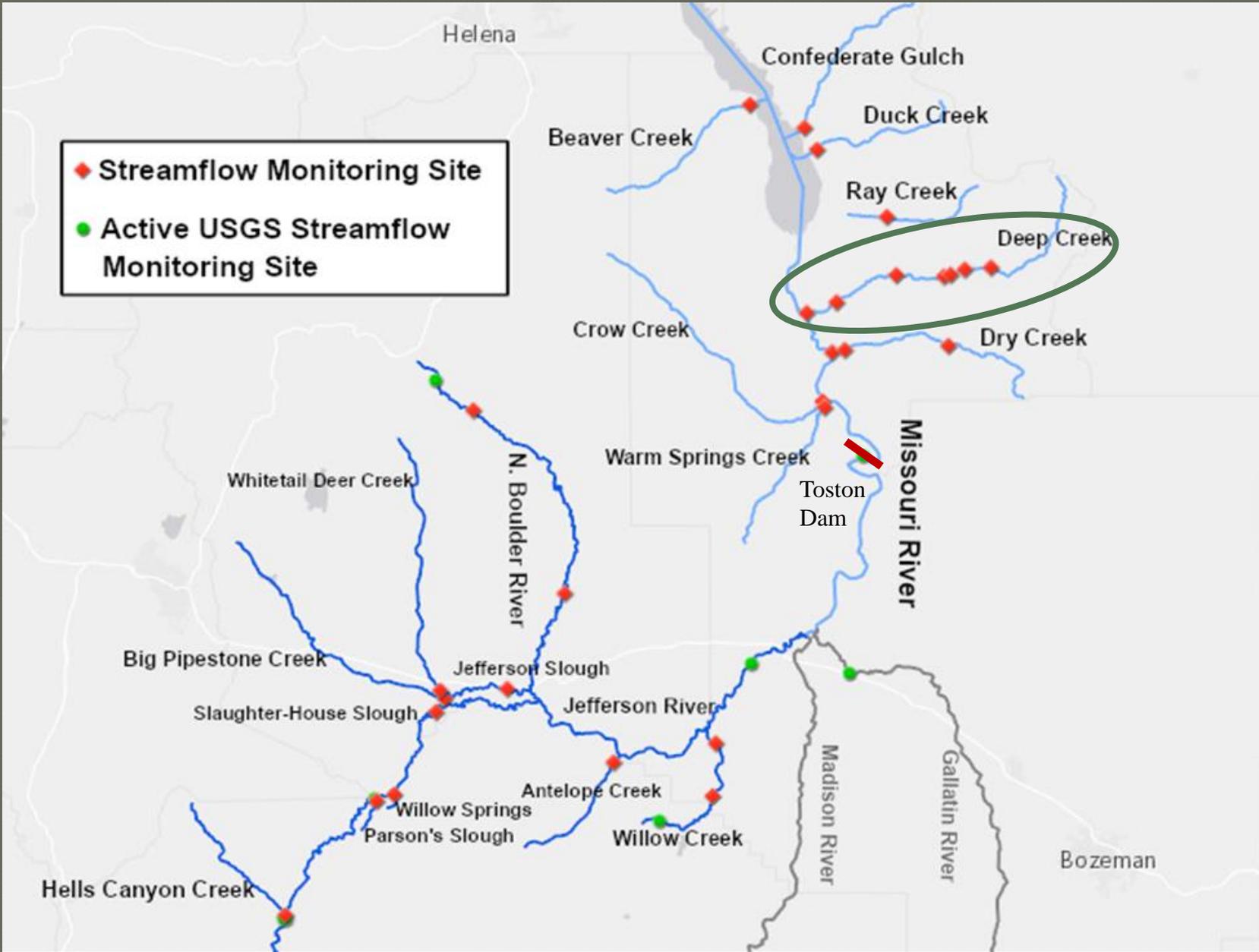


Tributary Streamflow and Aquatic Health

(Funding Help by DNRC via Toston Mitigation)



- ◆ Streamflow Monitoring Site
- Active USGS Streamflow Monitoring Site



Deep Creek Streamflow Improved Since 2013

Ten-year Water Lease Starting
in 2022



2012 9 1

Sept 2012 (< 1 cfs)

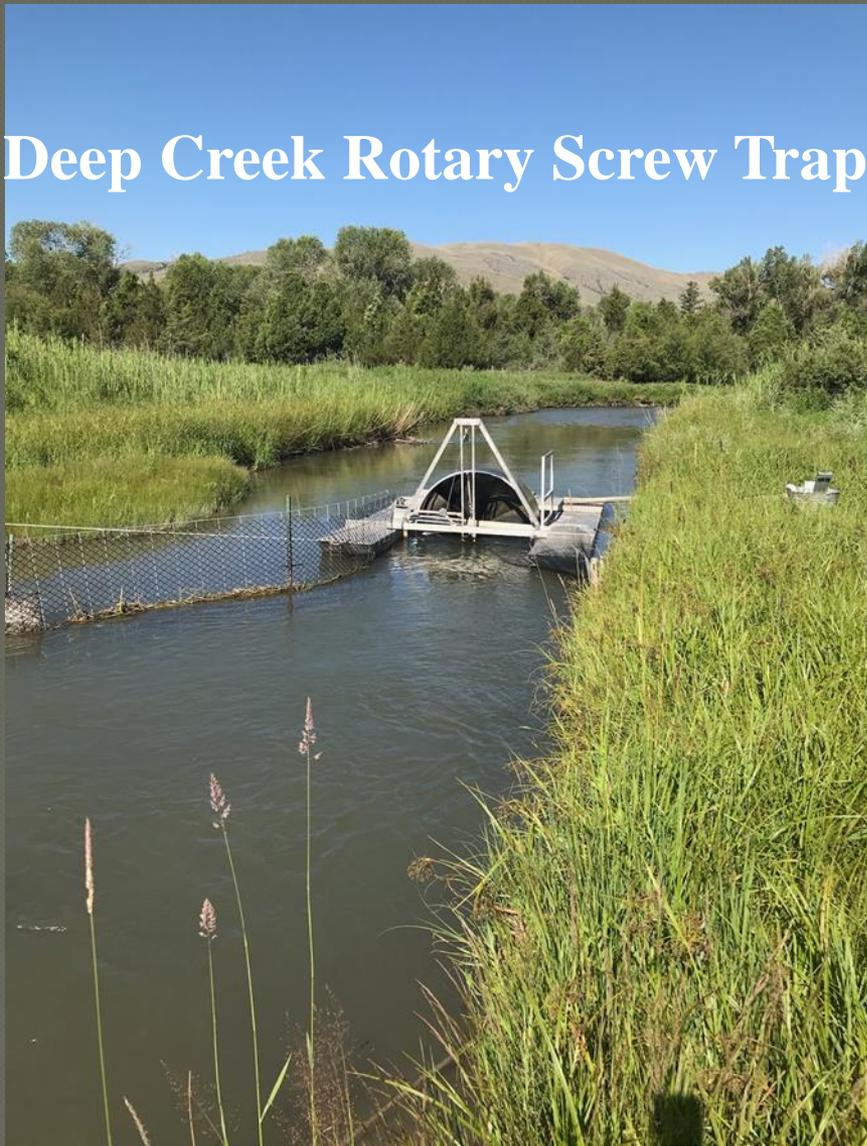


Aug 2015 (7 cfs)

2015 8 17

Juvenile Trout Recruitment to the Missouri River

Deep Creek Rotary Screw Trap



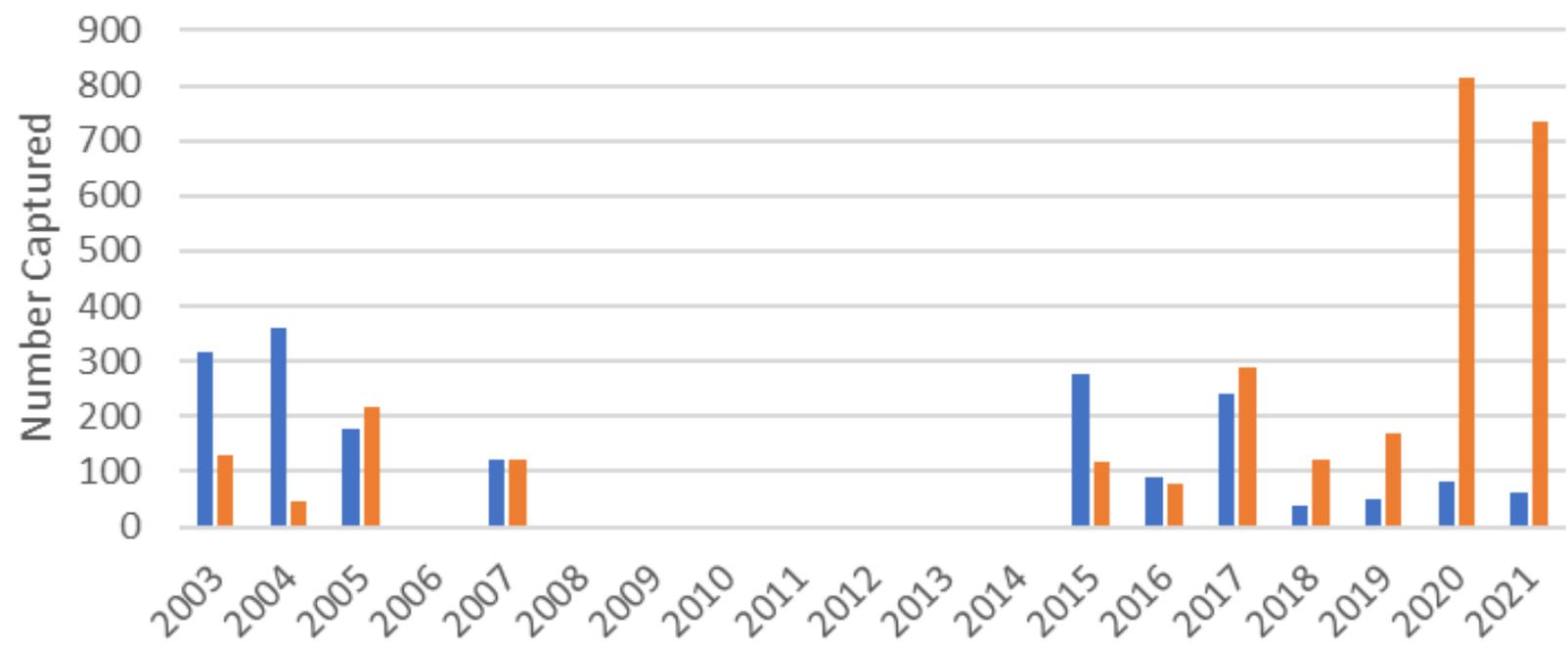
Out-Migrating Trout



Deep Creek Rotary Screw Trap

Number of Trout Captured (Not Estimated Number)

■ Brown Tr. ■ Rainbow



Improved Streamflow

*A few Walleye Observed at
Deep Creek Trap Since 2019*

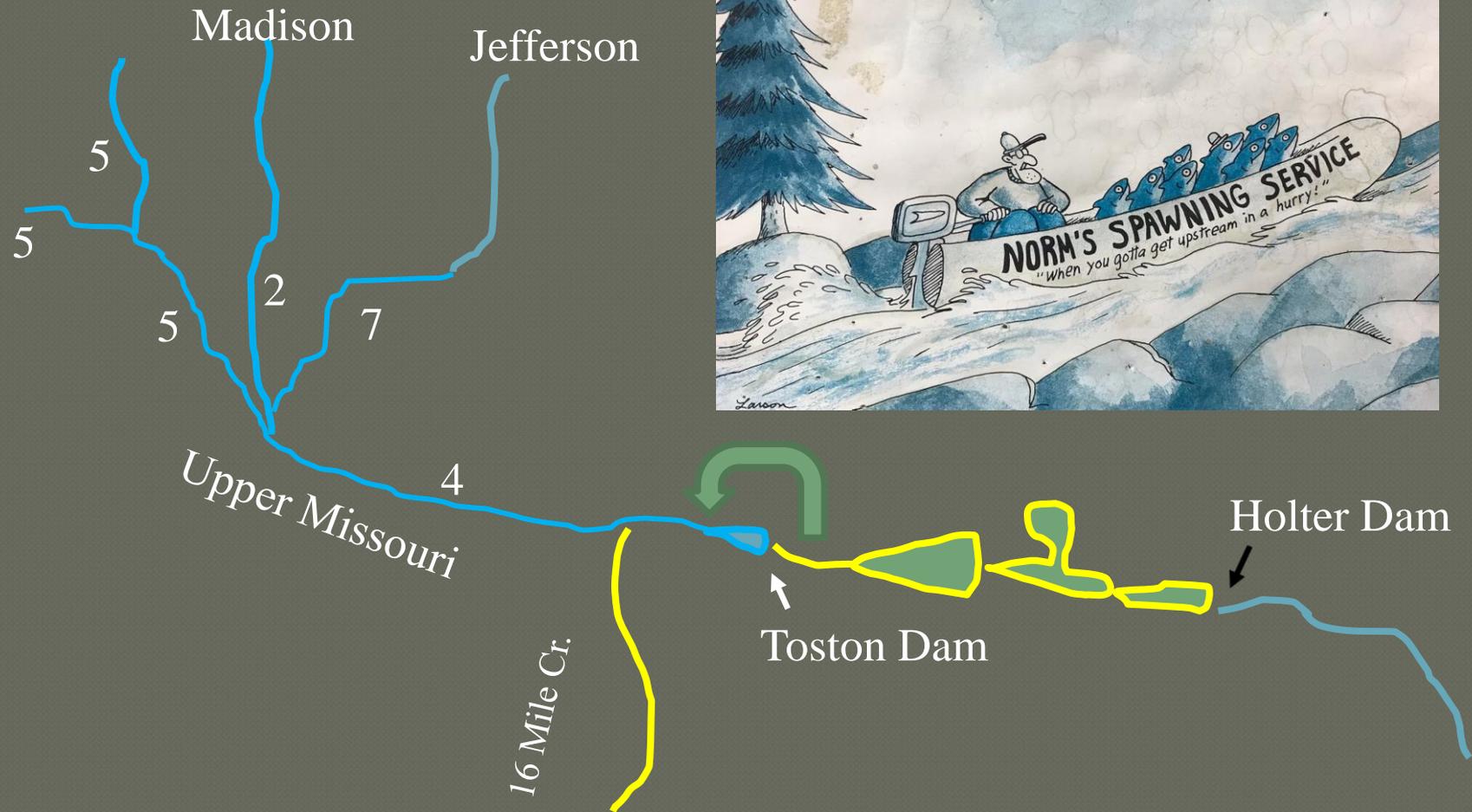


Coltan Pipinich and MSU Research Project: Determine Habitat Fragmentation Effects on Brown Trout at Toston Dam



Evaluation of Brown Trout Spawning Movements

Fall 2022: 30 Brown Trout Moved Above the Dam



Thank You

